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Application Of . . .

Wage And Hour Law

To Citrus Canning and Packing Industry

General Purposes

The Fair Labor Standards Act, also known as the Federal Wage-Hour Law, was enacted by Congress in 1938 for the maintenance of the minimum standard of living necessary for health, efficiency and general well-being of workers and to eliminate unfair competition through unconscionable low wages.

In passing the law, Congress found, and so stated, that labor conditions in industry engaged in interstate commerce or in the production of goods for interstate commerce, were causing:

1. Channels of interstate commerce to be used to spread and perpeutate detrimental labor conditions among the workers of the States.

2. An unnecessary burden to the free flow of interstate commerce.

3. An unfair method of competition in interstate commerce.

4. Labor disputes obstructing the free flow of interstate commerce.

5. Interference with orderly and fair marketing of goods in interstate commerce.

It was to alleviate these conditions that the Fair Labor Standards Act was passed. These purposes seem particularly applicable to canners and packers of citrus fruits in Florida. Canners and packers who desire to

pay their employees a decent wage have found it extremely difficult to market their products at fair costs because a few employers in the industry are able to cut prices by unmercifully cutting the wages of their employees.

By uniform and vigorous enforcement of the Law in the citrus fruit industry, the Wage and Hour Division, U. S. Department of Labor, hopes to eliminate the cut throat competition so ruinous to employers and employees alike.

To do this, Congress placed a "floor under wages and ceiling over hours."

That is, Congress set a minimum wage for workers engaged in interstate commerce or in the production of goods for interstate commerce, below which employers may not pay. At the same time Congress stipulated the maximum hours for which workers are to be paid at the regular rates. If employers wish employees to work beyond the legal maximum hours in a week, they must pay the workers time and a half their regular rates.

The overtime provision was written into the law as a penalty for working the same employee excessive hours. It often has been argued that if a person can produce 100 articles in 10 hours, he can produce 200 articles in 20 hours. That, of course, is

simply arithmetic, but it fails to take into account the human fatigue factor. The human body can take just so much and when the point of fatigue is reached, production begins to fall off. Both the United States and Great Britain have found that there is greater actual production in reasonable hours than there is at excessive hours.

Even Hitler, who has scant regard for human rights and frailties, has found that industrial accidents increased tremendously in his plants where workers were being kept on the job 70 and 80 hours a week. Hence the discovery that a workweek of a fair number of hours is a safety, as well as an increased production, move.

The real answer sought by Congress in the maximum hour and overtime provisions of the Act is the employment of more people, rather than the longer employment of the same people. A new shift can be hired at the regular rate, whereas a 50 per cent penalty must be paid the work-

er for working him longer than the number of hours specified in the Act.

Inasmuch as the Florida citrus fruit canning and packing industry's business is preponderantly interstate, the Fair Labor Standards Act is generally applicable to it and its em-

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New Quarters Florida Citrus Commission Dedicated . . .

In the presence of a large gathering, including notables of both national and statewide reputation, officials representing the city of Lakeland on Monday, Dec. 9, dedicated for the use of the Florida Citrus Commission and its office personnel new, modernistic and spacious quarters. The site of the new office building is a centrally located spot overloking Lake Mirror.

Representatives of the city of Lakeland were Mayor Ira C. Hopper, and City Attorney J. P. Marchant, and from the Chamber of Commerce J. Boyd McLean, president, and Harry L. Askew, chairman of the chamber's citrus committee. Mr. McLean, speaking in behalf of his organization, expressed the desirability of offering the citrus commission these new office facilities in order that it might satisfactorily maintain its headquarters in Lakeland.

Mr. Marchant, introduced by Mr. McLean as the one who carried the job of building the commission's quarters to the present status, said that the citrus commission had outgrown its original quarters by the great responsibilities placed upon it by the citrus industry of Florida. Attorney Marchant in turn introduced the Mayor Ira C. Hopper, who made the official presentation to chairman Luther L. Chandler, of the Commission. Before accepting the new quarters Mr. Chandler presented Governer-elect Spessard L. Holland.

Mr. Holland spoke as follows: "I am sure I am most happy to be here and delighted indeed to see these commodious quarters in which the Florida citrus commission and its personnel, the advertising agency that handles its advertising, and other agencies having business with it, will have from this time forward a much better opportunity, much better facilities, to transact their complicated business in a more efficient way than has ever been possible heretofore.

"I claim no credit for the creation of the commission, but happen to have been one of the authors of the bill, one of the framers, and have always fought very hard to continue it functioning as a body of great dignity, non-political, and which I feel should have the same power, standing and recognition that for

many years has been accorded the state board of control.

"The Florida Citrus Commission has many powers. Briefly, in three sentences: As a great admnnistrative body it handles the advertising fund, the only such fund raised in any industry in the nation, an advertising fund which will equal almost a million dollars in times of good crops. As a regulatory body it promulgates rules for the protection of the industry, and in the third place, it is an advisory body of great dignity. Sitting here from one part of the year to another, it accumulates facts goes to the heart of the problems in a great industry, makes recommendations to enforcement authorities, state and federal, and to legislative authorities, state and federal, particularly the state. I know of no body in any state serving agricultural industry which has quite the dignity

and authority that is possessed by this dignified body. I hope it will have in the years to come a greater amount of prestige, and from the standpoint of support, in a thoroughly non-political way, by your incoming administration, you may rest assured it is going to do just that.

"I think you know ! ow I feel about the commission. I think in this state, far-flung and scattered as it is, a body composed of representative members of the industry can bring it together, and I believe the hopes of those who worked so hard to create the commission are going to be fulfilled in a greater measure in years to come. I congratulate the commission personnel, its affiliated agencies, the city of Lakeland on locating the citrus commission here on the adequate basis that you have afforded in furnishing these facilities. I think

(Continued on page 14)



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Government Still Forecasts Big Crop

Latest forecast of the federal department of agriculture indicates the largest orange crop on record for the 1940-41 season, and a grapefruit yield of nearly six million boxes above the 1939-40 season.

The department estimates the orange crop at a total for all producing states of 81,887,000 boxes. This is approximately eight per cent above the yield of the 1939-40 season, and four per cent above the previous high record of 78,531,000 boxes in 1938-39.

Substantial increases are indicated in all important producing areas according to the government forecast.

The total Florida orange crop for 1940-41 is estimated at 29,800,000 boxes, as against a total production of 28,000,000 boxes last year and 33,000,000 boxes during the 1937-38 season.

California's orange crop is estimated at 48,287,000. Last season the California crop was 44,404,000 boxes.

Grapefruit production is placed at 40,364,000 boxes for all states, as against a production of 34,975,000 for the season of 1939-40.

The report places the Florida grapefruit crop at 21,000,000 boxes. The production last season was 15,-900,000 boxes.

The Florida lime crop, according to the government estimate, will decline from 95,000 boxes last season to a total of 80,000 boxes for 1940-41

Most Florida citrus interests are inclined to disagree with the federal estimate for this state. It is pointed out that the prevalent small sizes of the fruit will greatly reduce the box total forecast by the government agency. Then, too, it is felt that while the federal estimate reduced the previous forecast by some three million boxes of oranges and two million boxes of grapefruit, due to the excessive drouth and the early freeze, that the loss due to these causes is much greater than the government report indicates.

However, local interests agree that the crop of both oranges and grapefruit will be large and that the greatest care in marketing must be observed if the growers are to receive adequate returns for their fruit.

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APPLICATION OF WAGE-HOUR LAW TO CITRUS CAN-NING & PACKING INDUSTRY

(Continued from page 5)

ployees are usually entitled to the protection it affords. However, certain exemptions have been granted by Congress to industries of this character because of the highly perishable nature of their products. Other exemptions have been granted by the Administrator of the Wage and Hour Division under authority of the Act because of the seasonal nature of their products. Under these exemptions, the Florida citrus industry enjoys deviations from the strict wage and hour provisions other industries do not have.

Wages, Hours, Overtime

Two major provisions were written by Congress into the Fair Labor Standards Act around which all other portions of the Act revolve — minimum wages and maximum hours. In the last few years, social study has revealed a wide variation in the pay to workers in the same industry in different parts of the country and its possessions.

The result has been that when workers in one part of the country found they were getting less for the same work in a given industry than were workers in other parts, one of two things would happen: either the lower paid workers would strike, tying up production in their part of the country; or they would migrate to the place where better wages were being paid, thus upsetting the labor balance and leaving their own section bereft of their particular type of labor.

Either of these practices was found to be burdensome and obstructive to the free flow of interstate commerce.

The Fair Labor Standards Act became effective on October 24, 1938, and in it Congress declared that:

Every employer shall pay to each of his employees who is engaged in interstate commerce or in the production of goods for interstate commerce wages at not less than the following rates:

25 cents an hour for the first year of the Act, or until October 24, 1939.

30 cents an hour for the next six years or until October 24, 1945.

At the same time, Congress gave the Administrator of the Wage and Hour Division the power to issue Wage Orders covering entire specific industries fixing the minimum wages at not more than 40 cents an hour. This, however, is done only after an industry committee, composed of equal representation of the public,

employers and labor, has carefully considered all aspects of the case and has made a recommendation as to minimum wages for that industry. Such an order has not been issued covering the Florida citrus canning and packing industry.

Congress did not set an absolute maximum of hours in which an employee may be worked, but it did provide an overtime penalty which must be paid him if he is worked beyond certain maximum hours.

For the first year, until October 24, 1939, overtime began after the employee had been worked 44 hours in a single workweek.

For the second year, until Ocother 24, 1940, the employer was required to pay time-and-a-half overtime after 42 hours.

Since October 24, 1940, overtime must be paid after the employee has worked 40 hours in a single workweek.

Thus, after that date, it will be well to remember the slogan:

"Overtime begins at 40."

A workweek may begin any day of the week. Each workweek stands on its own feet and hours MAY NOT be averaged over two or more weeks. However, in the Florida citrus fruit canning and packing industry, there are certain exemptions in which employees may be worked as long at 12 hours in one day or 56 hours in one workweek without payment of overtime and certain other exemptions in which there is no limit on the number of hours to be worked without payment of overtime.

Employees are to be paid for every hour they are permitted to work or required to remain at their employers places of business. For enforcement purposes the Wage and Hour Division has taken the position that they are to be paid for rest periods which do not exceed 20 minutes and even for longer periods under some circumstances. They are to be paid for time spent awaiting repairs to machinery or waiting for supplies.

However, not every employee is employed on an hourly rate basis. Some are hired on a piece-work basis and others on weekly or monthly salary bases. But their compensation for the workweek must be at least as much as they would have been required to receive on an hourly basis. Information as to the computation of wages is set forth fully in the Wage and Hour Administrator's Interpretative Bulletin No. 4, available upon request addressed to the Wage and Hour Division at Jacksonville,

If an employee has not been paid

in accordance with the law, he may sue his employer and, if successful, recover not only the actual amount but an additional equal amount together with reasonable attorney's fees and costs of court.

An employee may consult a Wage and Hour inspector and make a confidential complaint against his employer and be protected against possible discriminatory treatment by his employer because of making such complaint. The Act provides severe penalities for employers who discriminate against an employee who consults the Division.

Overtime rates are time-and-onehalf the regular rate of pay of the employee. In other words, if an employee is receiving 50 cents an hour and he works 60 hours in a workweek, his total pay for that week would be 50 cents an hour for 40 hours, or \$20, plus 20 hours at 75 cents an hour, or \$15, a total of \$35.00.

Exemptions

Because certain industries, notably the Florida citrus fruit and canning and packing industry, are highly seasonal in character, the Fair Labor Standards Act has granted several exemptions in which departures can be made from the maximum hours and minimum wage provisions of the Act.

That is, the bulk of the business done in these industries comes at certain specified times of the year in which extra hours must be worked in order to save the ripening crop. These commodities are of such nature that they may not be stored with the same degree of safety as, say, corn, oats, or other commodities of a less perishable nature.

The first of these exemptions is one granted by the Act itself. Total exemptions from the maximum hours provisions to employees of employers engaged in the first processing, canning or packing of perishable or seasonal fresh fruits and vegetables. This exemption is for 14 weeks in each calendar year and dates from the beginning of the Act, October 24, 1938. Under this exemption, the employer may select any 14 weeks best suited to his purpose, declaring that he is claiming these weeks as his exempt weeks under Section 7 This exemption (c) of the Act. means that for these 14 weeks, no overtime must be paid, no matter how many hours are worked. However, this exemption does not affect the requirement that 30 cents an hour be paid.

The second exemption grants only partial exemption for an additional 14 weeks from the maximum hours

provision and is granted under Section 7 (b) (3) of the Act. Under this exemption, the employer is entitled to an additiona. 14 workweeks exemption during the calendar year from the overtime requirements, but carnot work his employees longer than 12 hours in any one day or 56 hours in any one workweek during these 14 weeks without payment of overtime compensation. Thus, if the employer should work an employee 15 hours in one day, but did not work him longer than 40 hours during the workweek, he still must pay overtime for the extra 3 hours on the 15-hour day. If, on the other hand, the total hours for the workweek should run to, say 60 hours the worker must be paid for 4 hours overtime.

A third exemption is granted in Section 13 (a) (10) of the Act to employers engaged in the canning and packing of agricultural or horticultural commodities within the "area of production" as defined by the Administrator. If an employee is within the scope of this exemption, he is not entitled to the benefits of either the wage or hour provisions of the Act. Under an amendment to the "area of production" regulations of the Division, which became effective October 1, 1940, employees are thus engaged if they work in packing or canning plants whose supplies come from farms in the "general vicinity" of the plant and the number of employees engaged in the packing or canning operations in the plant does not exceed 10.

From the very outset, there has never been any intention on the part of Congress to bring agricultural labor under the provisions of the Act. Accordingly, those engaged in strictly farming pursuits are not generally covered by the Act.

Individual Jobs

Quite naturally, the question uppermost in the mind of each worker in the Florida citrus canning and packing industry is:

"Am I entitled to the protection of the Wage and Hour Law?"

As a general rule, the question an be answered readily, but there are some instances in which an employee is a "borderline" case. Each of these must be analyzed in detail to place him in the classification in which he properly belongs.

Therefore, if a worker is not able to readily place himself in the proper category after reading this article, it is suggested he communicate with the Wage and Hour Division in Jacksonville, fully describing his du-

Owing to the various exemptions

granted under the Fair Labor Standards Act to the citrus fruit canning and packing industry, there are some employees who are exempt from both the wage and hour provisions. Others are totally exempt from the maximum hour provisions for part of the year and partially exempt for another part of the year and still others are only partially exempt for part of the year.

With respect to citrus packing houses, the following employees are totally exempt from both the minimum hours provisions of the Act:

- 1. All employed in groves and gardens whose duties include pruning, cultivating, fertilizing, spraying, dusting, irrigating, fencing, firing, and similar duties.
- 2. Pickers and foremen of picking crews.
- 3. Executive and administrative employees of packing houses, such as the manager, foremen and department heads, if they meet the requirements of the definitions contained in Regulations 541.

There is a second list of workers who are exempt under both statutory exemption of 14 workers, with no limit on hours, and the seasonal exemption of 14 weeks, with a limitation of 12 hours in one day or 56 hours in one workweek. These are:

- 1. Those workers who process or pack fruit, such as receiving clerks, dumpers, coloring room workers, graders, packers, (box-makers, box-lidders), stackers, checkers, car loaders, house mechanics, timekeepers, labelers, paper-room attendants, house foremen, grading foremen. The latter, however, may be exempt as executive or administrative employees.
- 2. Truck drivers of packers engaged in hauling from groves to tacking houses.
- 3. Whether office employees including clerks, bookkeepers, auditors, stenographers, telephone and teletype operators and other employees with similar duties are exempt under Section 7(c) cannot be

determined without specific information regarding the work of particular employees. If it appears that the hours of particular employees have varied directly with the amount of fruit packed, they appear exempt under Section 7(c). It is clear, however, that these employees are exempt under Section 7 (b) (3).

Then there are a third list of workers who are exempt only as to the season exemption granted under Section 7 (b) (3) of the Act. That is, they may be worked during the 14 weeks of seasonal exemption up to 12 hours a day or 56 hours a workweek without payment of overtime. These are:

- 1. Field agents, solicitors, fruit buyers.
 - 2. Garage mechanics.
- 3. Packing house watchmen and anitors.

4. As for the box-makers and box-lidders, they will not be exempt if they are not employees of the packing house, but employees of a contractor with the packing house.

In addition to the employees directly concerned with the Florida citrus canning and packing industry, there are others in positions closely allied to the industry.

One such class of workers embodies those working in fertilizer mixing plants from which growers purchase fertilizers. Such a plant may even be owned by the grower himself and may supply other growers. Whether employees of these plants are covered by the Act seems to depend on the answer to the fo.lowing question:

Does the plant sell its products entirely for consumption within the State of Florida or is it producing goods for interstate commerce?

If the plant is producing goods for interstate commerce, its employees are covered by the Act. In any case, workers engaged in ordering, receiving, unloading, etc., material received from outside Florida are covered, even though all the pro-

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THE CITRUS CROP OUTLOOK

As usual, there is a wide divergence between the Federal estimate of the Florida citrus crop and the opinion expressed by most Florida growers and shippers. The Federal estimate is far in excess of the expectations of most Florida citrus interests.

While it is true that heretofore the Federal estimates have been fairly accurate as measured by the actual shipments at the close of the season, there is ample reason to believe that in the present instance local opinion may be closer to the mark. Elimination of approximately 3,000,000 boxes of oranges from the early season estimates of the government forecasters due to drouth and early freeze, would seem to be entirely too low. The same may be said of a reduction of 2,000,000 boxes of grapefruit and 600,000 boxes of tangerines from the same cause.

Tangerines were badly hit by the early cold, and a loss of only 600,000 boxes would seem to be entirely too low an estimate. Oranges suffered severely from both drouth and freeze, the loss in some localities being excessively high. There has been an extremely heavy droppage of grapefruit as a result of the freeze.

Then, too, both oranges and grapefruit are running to unusually small sizes, which will materially reduce the boxage of both these crops. Since the rains following the extended drouth, there has also been much splitting of fruit which will tend still further to reduce the actual total of shipments.

Taken all in all, The Citrus Industry is inclined to believe that final results will show that the Federal estimate might well have been reduced by another five to seven per cent.

The fact remains that there will be ample supplies of all citrus fruits, but with greatly increased purchasing power in all consuming markets, it would appear that growers will be justified in holding their crops for prices which will return a profit. The increased purchasing power of domestic consumers and the lower supplies of competing fruits should more than make up for any loss of foreign markets. Finally, government purchases for relief distribution and for use in the numerous military camps should have a decided tendency to stabilize prices.

Growers should not be stampeded into taking any price offered through the belief that excessive supplies justify ruinous prices.

CITRUS AS A HOLIDAY FRUIT

Northern representatives of the Florida Chrus Commission report that holiday sales of Florida citrus fruits this season are greatly in excess of previous years. This highly desircable situation is accredited to two causes: First, the exceptionally fine quality of Florid citrus fruits this year; and Second, the extensive advertising campaign carried on by the Commission and Northern retailers in extolling the virtues of Florida citrus fruits as an essential element in the holiday diet.

Northern representatives report that holiday stocks of Florida citrus fruits were excessively heavy and that retail advertising was at a peak, centering around the effort of retail outlets in featuring citrus as a necessary part of the holiday fare. This effort brought gratifying results in that citrus is becoming more and more to be recognized as part and parcel of Christmas menus.

A recent estimated increase in the shipment of citrus gift boxes from Florida has gone far beyond expectations. Mr. R. K. Smith, Superintendent of the Railway Express Terminal Office in Jacksonville, two weeks before Christmas stated that he believed, on the basis of reports from offices throughout the state, that the increase in gift box shipments of citrus for the holiday season would be at least ten per cent above last year. A check up two days before Christmas proved, according to officials of the agency, that this figure was far below the actual shpments. They added that traffic was so heavy that they were having difficulty in taking care of the volume. This in spite of the fact that the Jacksonville Terminal is the agency with the largest conveyor loading system in the country, with more than 1,000 employees.

This is certainly a gratifying situation and one that should serve to hearten citrus growers as showing the increasing appreciation and consumption of Florida citrus fruits.

MAYO BOOSTS FLORIDA CITRUS

Nathan Mayo, Florida Commissioner of Agriculture in a recent radio broadcast gave Florida citrus fruits a well-deserved boost.

Speaking over Station WWL with a national hook-up at the annual meeting of the National Association of Commissioners, Secretaries and Directors of Agriculture in New Orleans, Commissioner Mayo asked his listeners: "Have you had your share of oranges and grapefruit today? Do you know that citrus fruits which are so necessary for your health are at the peak of quality and so moderate in price that every man, woman and child in the land can afford to buy them? If you have not, let me urge you to put citrus on your grocery list today."

Recent rains throughout most of the Florida citrus belt have done much toward supplying needed moisture which had been lacking for the past three months.

World Production Of Citrus

European markets for American citrus fruits have been practically closed since the outbreak of the war and a continuation of this situation may necessitate enlarged domestic consumption if present production levels are to be maintained, according to a review of world production and trade by M. A. Wulfert, Foodstuffs Division, Department of Commerce.

The past two decades have witnessed a rapid expansion in the production of citrus fruits in the United States with the result that growers and packers have depended upon foreign markets for the profitable marketing of a portion of the crops.

Production and exports from a number of other producing areas in the world have also risen rapidly to the point that American citrus fruits ercountered increasingly severe competition in world markets prior to the present European war.

Production in practically every citrus fruit area has been gaining momentum during the past 20 years. This trend is expected to continue for at least five years as the most recent plantings come into bearing. War conditions have had little effect on the citrus groves in the countries at war.

World production of oranges at the present time totals about 200,000,000 boxes annually, of which the United States accounts for 35 per cent; Spain and Brazil, 17 per cent each; Italy, Japan and Egypt, 5 per cent each; and Palestine, 4 per cent. World production of oranges has exceeded demand during recent years and much of the crops had to be disposed of unprofitably.

Production of grapefruit is considerably less than that of oranges but the increase in production during the past 5 years has been more rapid. The introduction of grapefruit into new world markets has been pushed vigorously and the consequent heavy demand has resulted in rapid expansion of production.

The United States accounts for about 88 per cent of the annual world crop of grapefruit with Palestine accounting for about 5 per cent. Grapefruit is grown to some extent in practically every citrus producing country. Production will probably be

continued to be enlarged for the next several years.

Lemons are not grown so widely as oranges and grapefruit and production is more stable. The United States and Italy account for about 80 per cent of world production of lemons. Limes are grown in many of the citrus producing countries but the har-

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vest is comparatively small and the fruit is used chiefly in the manufacture of lime juice and oil.

Titled "Citrus Fruits, World Production and Trade" copies of the report may be had at 10 cents each from the Superintendent of Documents, Washington, or from any district office of the Bureau of Foreign and Domestic Sommerce.

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Diagnosing The Present Crop Situation

G. D. SLOAN

Often, when we are faced with an exceptionally large crop of fruit, something happens during the season to reduce that crop the season to reduce that crop to normal or below normal. That is exactly what has happened this year and the large dropping of fruit that has been, and is being, experienced over the entire cit-rus belt is directly accredited to two factors. First, the drought; second, scale infestation.

In most citrus producing areas, a little or no rainfall fell between the middle of September and the middle of December, a period of three months. A citrus tree, being an evergreen and always more or less active, requires an enormous amount of water for normal development, and when it is carrying a crop of fruit, still a greater amount is required in order to properly maintain the tree and de. velop the fruit.

The drought during this period has resulted in fruit not sizing and likewise has resulted in a delayed function; hence, a delayed maturity. A tree suffering from lack of proper moisture becomes weakened and is more susceptible to damage from insects, cold or other unsatisfactory condition than is a normal tree. When such con-ditions prevail, fruit as well as the foliage shed very readily.

The scale infestation during this year has been the worst generally we have seen in our twenty-five years experience, and the dry weather has been no little factor in that matter. During dry weath-er, our friendly fungi cannot develop; consequently, the scale has had a free reign except where careful oil spraying has been practiced; and even in many cases where oil spraying has been fol-lowed, the results have been unsatisfactory. This, likewise, has been largely due to weather conditions, but in some cases due to improper application of the material.

The final result is that we are now faced with an excessive crop of fruit but may wind up our season with a short crop.

Having gone through such condition, trees are naturally somewhat weakened, and in order to reestablish them in a normal healthy condition, three factors must be taken into consideration. First, a sufficient supply of water; second, the necessary amount of (Continued on opposite page)

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TOTAL ABOUT VITAL ELEMENT BRANDS

Here's what an Orange County grower says:

"Will have to admit that Superior fertilizers have done everything you claimed for them. I am entirely satisfied with the results as shown by the fact that I am giving you the business again this year for the groves I handle."

tizer Company

. Sla, Pres.,

P. O. Box 1021

oady At 47th Street, Tampa, Florida



well balanced plant food; third, adequate insect control.

If rainfall is not sufficient, the only other means of supplying water is through irrigation. Many growers are well equipped for irrigation and others are becoming equipped. Too many growers, however, who have irrigation fail to use it early enough, or often enough, for best results. Irriga-tion can never take the place of rainfall, but it certainly pays when we do not get that necessary

Well balanced plant food does not consist of an application of fertilizer consisting simply of Ni-trogen, Phosphoric Acid and Potash. We now realize that Calci-um, Magnesium and Manganese are just as important as Phosphoric Acid and Potash, and like-wise other elements, such as Copper, Sulphur, Iron and Zinc, are very essential to the best development of the fruit and tres. Large amounts of these elements are not essential except where there is a definite deficiency, and if they are supplied in reasonable quan-tities in each application of fertilizer, that deficiency should not

The lack of Calcium, or the lack of Magnesium, has often resulted in a crop failure and a very unsatisfactory tree condition, as definitely as the lack of Nitrogen would result in an unsatisfactory tree condition or a crop failure; and, furthermore, it is not possible through a soil analysis, possible through a soil analysis, no matter how carefully and accurately that analysis may be made, to determine the exact amount of these elements required. There are too many factors to take into consideration.

Recognizing these factors, manufacture our Extra Value Vital Element Brands to carry a reasonable amount of these elements; not a sufficient amount to correct a deficient condition, but a suffi-cient amount to prevent a defici-ency occurring if soil conditions are well balanced. The results obtained from the use of these brands by our customers are the most convincing argument we have to offer in our favor.

If an adequate supply of moisture is maintained and a sufficient amount of well balanced plant food provided, and yet insect pests not controlled, little may be accomplished, certainly in a sea-son such as we have experienced this year when the heavy infesta-tion of scale has exacted a heavy toll. All three must go hand in hand if entirely satisfactory results are obtained.

Because of the drought this fall,

the winter application of fertilizer in many cases has been de-layed, and in some instances there is a tendency on the part of the grower, because of the lateness (Continued on page 22)

NEW HEADQUARTERS OF FLORIDA CITRUS COM-MISSION DEDICATED (Continued from page 6)

that the industry is to be complimen-

ted and congratulated."

Mr. Chandler, in thanking Mr. Holland, stated: "While it is not on the program and was not intended to be said, may I hasten to assure you, our next governor, that this citrus commission intends to do just exactly the things you have outlined that it should do, and I pledge you herewith our full cooperation. This will certainly be your commission and we want you to help us guide the industry and do the things we really should do.

"We have, as you know, ten other members on the commission, and I want to introduce these gentlemen to you. I want to tell you in advance that the citrus commission is an infant yet, only five years old. Give us 15 or 20 more years and there is no telling what we will do. These gentlemen, the commission's department heads and those associated with us, have really given sincere thought and study to the problems of the industry. There is not a brilliant man among us, but we have sincerely worked for the betterment of the industry.

Chairman Chandler introduced Messrs. A. S. Clark, Eustis, John M. Criley, Terra Ceia, T. C. Hawthorne, Ocoee, Harvey L. Henderson, Winter Haven, John M. Knight, Vero Beach, E. T. Lyle, Orlando, John Maxcy, Frostproof, E. G. Todd, Avon Park, Harry D. Ulmer, Largo, and E. H. Williams, Crescent City, members of the commission.

Continuing, Mr. Chandler said: "The City of Lakeland has been very nice to the citrus commission. We came here five years ago, an unknown, unpredictable quantity. There has been a lot accomplished, most of which the public does not know about. We have made mistakes, our predecessors made mistakes, and others to follow will make mistakes. have tried to follow in general and as nearly as we could those outlines given us by the legislature. There has been much expected of us that we could not do, as the laws which gave us the authority also limited that authority, and I hope the public understands our limitations. The commission has tried hard to earn the confidence of the industry and expect to continue to do so.

"When the question of space came up, we thought first we would try to improve what we had, but found it could not be done. When word

got out that our quarters were inadequate, several cities asked us to move our headquarters and made very attractive offers, but we didn't think it quite the proper thing to do, in view of the fact there are seven or eight federal and state agencies which have their offices here and play an important part in the industry. The city of Lakeland came to us and painted a picture which sounded rosy. We looked at this old building, and it didn't look like it does today. How they did it, I don't know, but they have certainly done a most excellent job and it is going to be a job for the commission to live up to the dignity this building requires. I pledge you the citrus commission is going to do its best to live up to the dignity that becomes it.

"I could go on for some time, I feel so full of this nice, new building, but on behalf of the employees of the commission, these who to work here day after day. I want to par-

ticularly thank you. You have made life more livable and more pleasant for them, and also given the citrus industry something of which to be proud. So, in behalf of the citrus commission, I accept this building, together with all the responsibility that goes with it, and pledge you we will try to live up to it."

Following the official dedication services, the City of Lakeland was host at a fine barbecue held on the shores of Lake Hollingsworth. In addition to members of the commission, the office personnel and many leaders in the citrus industry gathered for the occasion, there were several U. S. senators and representatives present. Florida's senators Charles O. Andrews and Claude Pepper and Representative J. Hardin Peterson were accompanied by Senators Schwartz, Wyoming, Ellender, Louisiana, Wiley, Wisconsin, representatives Kennedy, Maryland, Ramspeck, Georgia, Thomas, New Jersey.

In three short years URAMON

has established itself as an important <u>Nitrogen</u> <u>Fertilizer</u>

"TRAMON" urea nitrogen fertilizer was first offered for sale three years ago. Today, because of its high efficiency, its low cost, and its good mechanical condition, "Uramon" is one of the important nitrogen carriers used by fertilizer manufacturers and growers. The high efficiency of "Uramon," a water-soluble organic, is due largely to its complete availability, resistance to leaching, and low equivalent acidity.

Used in nitrogen-potash top-dressers and complete fertilizers, "Uramon" gives a sustained effect in addition to the quick action usually obtained from soluble sources of nitrogen. Used as a material for direct application, the quick action and long-lasting effect obtained from "Uramon" has caused many growers to recognize the value of this nitrogen fertilizer.





E. I. DU PONT DE NEMOURS & CO. (INC.)

Florida Growers Start Sign-up Drive

County Units of Florida Citrus Growers Inc. were instructed by the board of directors meeting in Davenport on Dec. 19, to begin signing up 70 per cent of the state's citrus tonnage in a cordinated marketing program.

About 80 growers, including 13 directors from 19 counties, discussed points of the program at the meeting at which George I. Fullerton, of New Smyrna Beach, presided.

James J. Banks, Orlando, chairman of the committee which prepared the marketing program, told the directors "it is now up to the county units to function as such and educate growers to where they will be able to take action on this plan."

Banks answered questions and explained the contracts whereby individual growers will permit the Florida Citrus Producers Trade association to act as their agent in marketing their fruit, providing a total of 70 per cent of the tounage is signed up.

The grower-member, Banks said, may market his fruit through any shipper-member of the association with which he can get the best deal. He pointed out that the majority of members of the producers trade association has approved the plan.

A committee of 11 shipper members will have authority to regulate shipments and establish minimum prices, with the advice of an 11-member advisory committee of grower-members, under the marketing contract,

'We've come to the place where we'll either go ahead or we'll disintegrate," Banks added in urging prompt action on the part of county units in signing grower-members.

RESEARCH WORKERS MAKE SUGGESTIONS ON FARM PROBLEMS

(Editor's Note: 'nformation in this column comes from research workers of the State Experiment Station in Gainesville.)

Removal of all affected leaves and trash and leaves from around affected plants and the use of a good fungicide are the most effective control measures against leaf spotting diseases that attack Chinese Evergreen, Boston ferns, Nephthytis, and other ornamentals.

When a leaf spotting disease shows

up, remove the affected leaves, clean up all fallen leaves and debris around the plants, and burn them. Then spray with a fungicide that leaves little or no residue.

Ammoniacial copper carbonate or Florodo are good fungicidal sprays. Because ammoniacial copper corbonate gives off fumes that are toxic to plants it should never be used in rooms or greenhouses that are not sufficiently ventilated. Neither should it be used in slat sheds or under shades when there is not at least a gentle breeze blowing.

Florodo is a copper-soap spray that does not injure plants, leaves little stain, and has high fungicidal value. Directions for making this spray may be obtained from the State Experiment Station.

To kill borers in seed cane, soak it in a solution of one part Black Leaf 40 or other nicotine sulfate to 750 parts bordeaux for one hour. A watering trough or long vat is convenient for treating the cane. Throwing the seed cane in a pond and letting it remain there for several days has been employed for this purpose to some extent, but it is not as effective as soaking the cane in a borbordeaux nicotine sulfate solution.

Double Value With ...

BROGDEX REDUCES DECAY RETARDS SHRINKAGE

The Brogdex Process not only provides a

Better Wilt Control

but it also makes possible a

Better Polish

one that has longer life

* *

Some other wax processes may give you one and some the other, but . . .

BROGDEX

GIVES YOU BOTH

B. C. SKINNER, Distributor

THE BROGDEX SYSTEM

Coloring Room Process

Color Added Process

DUNEDIN, FLORIDA

APPLICATION OF WAGE-HOUR LAW TO CITRUS CAN-NING & PACKING INDUSTRY

(Continued from page 9)

ducts of the plant are sold for consumption in Florida. In no case are workers in fertilizer plants entitled to either statutory or seasonal exemptions. The specific answer to the coverage question may be obtained only on inspection of the individual plant.

It has been noted that truck drivers hauling fruit or vegetables from the groves or gardens to packing houses may be exempt in certain instances from provisions of the Act. These exemptions, however, do not apply to truck drivers hauling these commodities from packing houses to shipping points for shipment in interstate commerce. Section 13 (b) (1) of the Act, however, provides an exemption from the maximum hours for any worker over whom the Interstate Commerce Commission has power to establish maximum hours of service, such as truck drivers hauling to shipping points. Even if a truck driver's maximum hours are under I. C. C. regulations, he is still under the minimum wage provisions of the Fair Labor Standards Act.

The Administrator of the Wage and Hour Division is given authority under the Act to establish regulations for the employment of learners, apprentices and handicapped workers, whose earning capacity is lessened by age, physical or mental deficiency or injury. These may be employed at lower rates than the 30 cents an hour established by the Act (or higher rate established by Wage Order), but the Administrator has generally declared this figure shall not be less than 75 per cent of the applicable minimum.

Establishment of a learner's class in the industry would involve determination of an unavailability of experienced workers in the industry and a hearing before the Hearings Branch of the Wage and Hour Division would have to be held for that purpose.

Regulations governing employment of apprentices involve, among other things, classroom instruction on subjects allied to the industry for a substantial portion of the apprenticeship period.

Employment of a person on a handicapped basis can be made only after the individual has been determined to be actually handicapped and capable, by reason of his infirmity, of earning only an amount less than the applicable minimum rate. Following this determination, a certifi-

cate must be issued to the handicapped individual by the Wage and Hour Division before the worker may be paid less than the applicable minimum,

The Atlanta office of the Wage and Hour Division is authorized to issue such handicapped workers' certificates in Florida and Georgia. If it is desired to apply for one, the Jacksonville office should be notified in order that proper arrangements may be completed with dispatch.

Child Labor

The Fair Labor Standards Act recognizes that child labor, like low wages and long hours, results in unfair competition. Stringent regulations surround the employment of miners under the Act in industries producing goods for interstate commerce, and canning and packing are regarded as production under the child-labor provisions of the Act.

The basic minimum age for employment is 16, but children 14 and 15 may be employed in certain occupations outside school hours and under conditions determined by the Chief of the Children's Bureau not to interfere with their health and well-being.

The minimum age standards do not apply to agriculture during periods a child is not legally required to attend school under the state law, but it should be borne in mind that much of the Florida citrus fruit industry is not agriculture but processing and therefore comes under these child-labor provisions.

Children 16 and 17 years old may not be employed in any occupation found by the Chief of the Children's Bureau of the U. S. Department of Labor to be hazardous or detrimental to their health or well-being. The only occupation in the citrus fruit industry which is now subject to a hazardous occupations order is work as a driver or helper on motor vehicles, occupations in which no minors under 18 should be employed.

An employer may protect himself from unintentional employment of children under the minimum age by securing the proper age certificates for minors who are under 18 years of age employed at ordinary tasks and for minors 18 or 19 in occupations which have been declared hazardous. Certificates of age may be obtained in Florida by application to the county superintendent of schools.

Under the child labor regulations, children 14 and 15 years of age may not be employed in any of the following occupations:

1. Manufacturing, mining or pro-

cessing, including duties in workrooms or work places where goods are manufactured, mined or processed.

- 2. Occupations involving operation or tending hoisting apparatus or any power-driven machinery other than office machines.
- 3. Operation of motor vehicles or as helpers on them.
 - 4. Public messenger service.
- 5. Occupations declared hazardous by order of the Chief of the Children's Bureau for minors 16 and 17 years of age.

Children 14 and 15 years of age may be employed, however, in other occupations provided they work

- 1. Outside school hours
- 2. Not more than 40 hours a week when school is not in session
- 3. Not more than 18 hours a week when school is in session
- 4. Not more than 8 hours a day when school is not in session
- 5. Not more than 3 hours a day when school is in session.

All work performed by children 14 and 15 years of age must be performed between 7 a.m. and 7 p.m. except in certain instances not applicable to the Fiorida citrus packing and canning industry.

Since the law makes no provision for the employment of children under 14 years of age, the presumption is that they may not be employed for any purpose in industries subject to its child-labor provisions. The Federal Act, however, does not interfere with the employment of a child by his parents or those standing in place of his parents provided the employment is not in manufacturing or mining occupations.

To the Florida citrus fruit canning and packing industry, most of whose activities come under the child labor provisions of the Act, it is a matter of vital importance to be familiar with these regulations.

Any citrus fruit packing or canning plant is subject to inspection at any time by inspectors and investigators of the Wage and Hour Division as well as those of the Children's Bureau.

Penalties

Two forms of action may be taken by the Wage and Hour Division and the Children's Bureau in the U. S. Courts against violators of the Fair Labor Standards Act — Civil and Criminal.

In a civil action, the Division or the Bureau can seek an injunction against the violator and the court may enjoin the employer from future violations of the Act, and may restrain the shipment of goods produced in violation of the provisions of the Act.

In addition, the worker himself may sue his employer for twice the amount due him for back wages, and if successful, also may collect reasonable attorney's fee and the costs of the action.

In the case of employee suits, the worker must engage his own lawyer, as the Division does not conduct these suits for workers, although the Division may intervene if the interests of the Division require it.

In a criminal case, a violator may be prosecuted in the U. S. District Courts for any or all of the following willful violations:

1. Shipping or offering for shipment, delivering or selling any goods, either directly or indirectly, in interstate commerce, produced in violation of the wage and hour provisions or in violation of the regulations governing learners, apprentices, messengers, and handicapped workers.

2. Violation of the wage and hour provisions or of the regulations governing learners, apprentices, messengers, and handicapped workers.

3. Discharging or discriminating against any employee exercising his rights under the Act.

4. Violating the oppressive child

U. S. To Buy Fruit Juices After First

Announcement is made that the United States government will, after the first of year, resume the purchase of fruit juices and will also augment its present fresh fruit purchases to stimulate the price for citrus fruits.

labor provisions.

5. Falsifying records or failing to keep records or other violations of the record keeping regulations.

If an employer is convicted of any of these offenses, he may, on first conviction, be fined up to \$10,000 for each violation. For the second and subsequent violations he may be imprisoned up to six months for each violation, fined up to \$10,000 for each violation or both.

This article has intended to treat only the general aspects of the Wage and Hour law so as to give the Florida citrus packing and canning industry worker a bird's eye view of the law as it applies to him in his relationship with his employer. If individual questions have not been answered, inquiries should be addressed to the Wage and Hour Division, Post Office Building, Jacksonville.

Marketing advisory committees have been informed by Purchasing Agent John L. Peters that their request to the surplus marketing administration that the government augment its present fruit purchases with a fruit juice program, has been granted and that buying is expected to begin shortly after the first of the year. Substantial quantities of grapefruit also will be purchased by the government under the new program.

A. V. Sauerman, of Clearwater, chairman of the growers' administrative committee, said the program is similar to the one which "worked so well in Florida two years ago."

Growers and shippers committees at a recent meeting decided to recommend that present orange and tangerine grade and size regulations remain unchanged for the four-weeks' period starting Monday, December 23. Grapefruit restrictions were not discussed, since these were fixed some time ago for the entire season.

The committe joined in recommending to the secretary of agricul-

(Continued on page 20)





Of Fertilizer Effectiveness!

Inspect any grove following the Swift Program...

The Outstanding condition of the Croves tell better than words of the results Red Steer Brands Cive Their Users.

Swift & Company Fertilizer Works

> Bartow, Florida A Division Of Swift & Company

The LYONIZER

Department

COMPILED BY THE LYONS FERTILIZER CO.

Reports of Lyons Field Men . . .

SOUTHWEST FLORIDA F. W. (Felton) Scott

Growers in the Ruskin area are now planning to start planting their spring crops of tomatoes and pepper. Lettuce is now being harvested and the price is fairly good. Brocolli and cauliflower are also being moved to market from the Palmetto and Bradenton sections. Crops in the Ft. Myers area are looking extremely well with the potato crop scheduled to start moving around the 15th. Citrus throughout this section has been greatly benefitted by recent rains and the wilting has disappeared.

POLK AND HIGHLANDS J. M. (Jim) Sample

This is going to be a happy Christmas for growers all over this territory. After going through one of the most severe droughts ever experienced, we have now had sufficient rain to take care of the requirements of the trees for some time. There has been heavy droppage of fruit, especially grapefruit, in this territory as a result of the drought, but many growers are of the opinion that this will result in better prices for the remainder of the crop. Some few groves that received foliage damage in the November cold snap are putting on new growth to replace the fallen leaves and in some cases bloom is accompanying this growth. Scale and rust mite continue to be active.

HILLSBOROUGH & PINELLAS C. L. (Charlie) Little

Scale and rust mite have been extremely active during the past few weeks and this coupled with the dry weather causing growers to keep their irrigation pumps going has resulted in growers being kept busy both night and day. The fall fertilizer application was delayed by the drought, but now that we had some good rains, all growers will go forward with the fertilizer program immediately. Growers throughout this section are feeling optimistic about prices for fruit after the holiday season. There has been heavy droppage of grapefruit and the total crop will be considerably reduced in

WEST CENTRAL FLORIDA E. A. (Mac) McCartney

The recent rains have been a life-saver for both vegetable and citrus growers in this territory. The drought had reached grave proportions, and of course will be responsible for the considerably reduced acreage of vegetable crops in this territory. In the Webster section a start was made this fall by a few growers to produce a fall crop, which it is believed would have turned out well if it had not been for the dry weather. However, in spite of adverse conditions growers did fairly well

NORTH CENTRAL FLORIDA H. C. (Doug) Douglass

The long drought along with the recent cold spell has played havoc with fruit throughout this section. There is a great deal more cold damage than was at first anticipated, and this alone will result in a considerable reduction in the tonnage of shipable and marketable fruit. Coupled with this, the drought has resulted in extremely heavy droppage, and taking the factors of cold and drought together we are of the opinion that the tonnage of citrus fruits in this section has been prorated to the point that growers can anticipate good prices for their fruit after the first of the vear. Scale insects are very active over the entire territory, and many growers are doing a thorough job of irrigating and then coming back immediately with oil emulsion.

EAST COAST

Growers throughout this section are getting their spring crops under way, and it is expected that the acreage will be somewhat increased this season. Beans in the lake section have passed the peak of production and another crop will soon be coming in. There are quite a few tomatoes and pepper being planted around the lake. The celery growers in the lake section are beginning to harvest their crop. Potatoes will start to move to the market from the lower east coast shortly after the first of the year.

Horticultural Hints

Now that we have had some good rains all over the state we can stop worrying about when the drought will be broken, and get down to the serious thought of looking after our interest in the crops that are to be produced in the future. It is very essential that groves be properly cared for at this season if we are to have a big crop next year. A citrus tree in a weakened condition just cannot set the fruit after the bloom appears, and therefore we urge all growers to make a liberal application of fertilizer now in order that the tree can be storing up some vitality for the strain that will come when the fruit is being set and when the spring flush of growth starts. If you will consult with the LYONS FIELD MAN he will be glad to work with you.

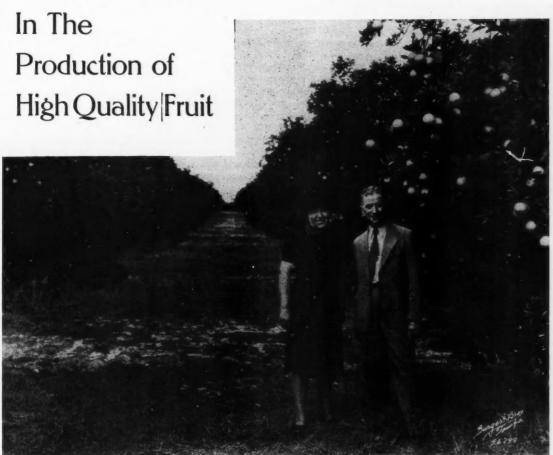
We feel certain that all vegetable crops are going to be worth money during the spring, and one of the important factors in producing large crops of quality produce is the fertilizer program. The Lyons Man in your territory will be glad to consult with you, have your soil checked, and supply you with the fertilizer that it suited to your particular needs.

This has been a bad season with droughts and cold weather, and insects have taken advantage of the situation. In some sections red scale has done particular damage, and this should be controlled at the earliest possible moment. It impossible to make a blanket recommendation here, but we do suggest that you contact the Lyons Field Man and have him make an inspection of your property and adivse with you. Rust mites have been extremely active during the past few weeks, and it is important to control them immediately. This can be done either with lime sulphur spray or with dusting sulphur. Be sure to check your grove.

It has been our experience that January is one of the most desirable months to plant new trees. If you have resets to go in your grove now is the time to make your plans for getting them plan-

THE LYONIZER wishes for all our readers a very happy and prosperous New Year.

Another Prominent Grower Recognizes The Value Of Lyons Fertilizers



View of a section of the 300 Acre R. M. Clewis Grove near Lutz, showing Mr. and Mrs. Clewis in the foreground. Mr. Clewis states that he has used Lyons Fertilizers over a period of 15 years and has consistently produced Large Crops of High Quality Fruit.....

Widely known over Florida as a banker, business man and citrus grower. Mr. Clewis has always taken great pride in his grove and has devoted much study to every modern method of producing High Quality Fruit. Prominent in the Florida Citrus Growers organization Mr. Clewis

has taken marked interest in the welfare of the state's citrus growers and is recognized as one of the most successful growers in the state . . . Naturally the Lyons Fertilizer Company takes pride in the fact that he uses our fertilizer in producing his excellent crops.

Head Of Horticultural Society Passes

Mr. C. I. Brooks of Miami, president of the Florida State Horticultural Society since 1937, died at his home on the night of Monday, December, 15, after a short illness.

Mr. Brooks had long been active in Florida citrus circles and for twelve years before his election to the presidency, had served as vicepresident of the Florida State Horticultural Society.

Born in Cortland, N. Y., Mr. Brooks in early life went to New York City in 1891 where he engaged in the insurance business, later going to Denison, Texas, as vice-president and general manager of the Southwestern Surety and Insurance Com-

Due to the health of his wife, Mr. Brooks came to Florida in 1914, locating in Miami and purchasing a citrus grove. He later built a packing house and opened several stores in Miami for the sale of fancy citrus fruit. Still later he developed a wholesale business, supplying many stores, hotels and restaurants with fruit from his groves.

In 1924, he engaged in the real estate business with the firm of Lee, Brooks & Weede, Inc., but retained his citrus interests. During the past few years he had devoted most of his time to his citrus business. He was one of the organizers of the Florida Avocado and Lime Growers, Inc., and was for many years a director of the organization.

In connection with his citrus packing and shipping business, Mr. Brooks had for the past ten years carried on an extensive business in the marketing of avocados and Persian limes. as well as developing an extensive market for Haden mangoes,

In the death of Mr. Brooks, the citrus and other horticultural interests of Florida lose an able leader, the Florida State Horticultural Society a hard-working officer and loyal member and the state of Florida an honored citizen.

Until the next annual election of the Society, the position of president will be filled by Mr. T. Ralph Robinson, who for some years past has ably served the Society as vice-president.

UNITED STATES TO BUY FRUIT JUICES

AFTER FIRST OF YEAR

(Continued from page 17)

ture that a technical change in regulations be made so that sizes will be indicated in terms of minimum diameters of fruit, rather than in the number of fruit which can be packed in a box or half box of standard

Frank Seymour, manager of the growers' committee, said this will enable packing house foremen and inspectors to determine more easily and accurately whether fruit packed in any of the many different types of containers is within the required size restrictions.

H. B. Davis, federal marketing specialist, reported that a number of cases of grade and size regulations were being investigated and that the

department of justice will send a representative to Florida soon after January first to follow up the investigations.

The growers' committee approved a sub-committee report which advocated tightening up on permits for shipment of ungraded and unsized fruit outside the state for processing. The sub-committee reported that, after a conference with a similar group from the citrus commission, it was agreed that processing was something more than refrigerating and that a number of persons and firms seeking permits could not qualify under such as interpretation.

A copy of the sub-committee's report has been forwarded to Washington. Members of the group are Thomas B. Swann, Winter Haven; A. V. Sauerman, Clearwater: Harry L. Askew, Lakeland, and J. M. Dougles, Weirsdale.



SOME INTERESTING INSECTS

(Continued from page 4)

One of the insects most commonly sent in for identification is the socalled Plaster Bag Worm. This makes for itself a case about the shape and color of a pumpkin seed from either end of which the caterpillar may push out his head and forepart of his body including its legs for locomotion. This insect was very scarce in Florida until about ten years ago, but now is probably the most common insect sent in for identification. In looking up the habits of this insect the only statement that we could find was that it fed on the dried remains of insects in spider webs. It may do this, but we have never caught it eating any such material, but have found that it will feed voraciously on woolen goods. It is sometimes a serious pest of rugs and other woolen articles, but we have found it rather easily controlled by dusting insect powder containing pyrethrum under the rugs or on the garments.

An animal that is commonly sent here for identification is the Whip Scorpin or "Grampus." This is a dark brown or black animal which grows to be about two inches long and to the end of its abdomen is attached a slender tail nearly as long as its body. It has in front two powerful jaws which in connection with its long whip-like tail makes it a rather terrifying looking animal, but as a matter of fact it is practically harmless. Its fearful reputation has probably resulted from its resemblance to the true Scorpion which bears on the end of its tail a pretty powerful sting. Probably like all members of the spider tribe to which the Whip Scorpion belongs it has a little poison in its jaws, but it would be very difficult to make it bite a person and if it did, the bite would be no more serious than that of any other spider, and nothing like that of the Black Widow. This Whip Scorpion or "Grampus" makes a good pet in the mouse catching cockroaches, flies, mosquitoes, etc.

The Praying Mantis is another interesting insect which is not so common, but attracts attention when found. It belongs to the grasshopper tribe, but instead of eating vegetation like most of them, the front legs form two powerful grasping organs with which it can seize a fly or other insect and hold it while it eats it. While waiting for prey it stands perfectly stiff with the front end of the body in an erect position and holding up his two powerful front legs as if in prayer. It is this attitude which suggests the name of

"Praying," but it is more of a "preying" insect than a "praying" one. In medieeval times they were regarded with considerable superstitious awe because of this attitude. A number of bugs particularly those known as "Ambush bugs" have a similar habit. They are yellow in color and lie quiet in the center of a yellow blossom waiting for some luckless insect visitor to appear.

There are many members of the Hemiptera or bug order which get their nourishment by sucking the juices of other insects and sometimes attack human beings. One often sent in for identification is the Conenosed Blood Sucker or as it is sometimes called "Big Bed Bug." Out of doors they are very beneficial and destroy many caterpillars and other pests, but when they happen to get into a house, they may become so hungry as to attack the sleeper with very disagreeable results, both to the sleeper and the bug. A number of these predacious bugs which attack human beings are called "kissing bugs."

One with the similar habits of attacking other insects is a large bluish flat bug that commonly feeds on caterpillars. It is interesting to watch one of these fellows attack a caterpillar. He approaches slowly and stealthily and very slowly inserts his bill into the victim's body or legs. The luckless victim makes no effort to escape until it is too late. It is evident that in the initial attack the victim feels no pain. Probably the saliva of the attacker contains a substance which deadens the pain of the part attacked.

Some insects are very interesting because of their life history. Take, for instance, the Blister Beetles. Their early life is spent as parasites in the nests of grasshoppers and bumble bees, but in later life they are feeders upon vegetation. Most of our correspondents will inquire whether an insect is a friend or foe of his crops. How is one to strike a balance in the case of a Blister Beetle which is a friend in one stage of his life and a distinct enemy in another stage, or a friend when feeding on grasshopper eggs, but an enemy when destroying bumble bees which are important pollinators of flowers.

It is very fortunate for the human race that many insects prey upon other insects. They are, therefore, the allies of man. If all insects in this world attacked either man or his food crops; in other words, if they had ganged up on us, there would have been the end of the human race a long time ago.

We have all heard of the Mexican Jumping Beans. This jumping habit is due to the grub of a weevil which is feeding inside of the beans. When the beans are disturbed such as being placed on a table, the twisting and turning of the larva inside causes the jumping. Next spring if some of you will gather a number of the unopened buds of wild plums and lay them on a smooth surface, you will see a like phenomena due to the same cause, namely, larvae in the buds. In other words, Bouncing Buds.

Just now we are receiving a good many oak leaves with furry balls on them. These are the galls formed by some wasp-like insects or flies. The adult wasps or flies lay an egg in the tender leaf and at the same time inject a poison or the larva hatching out from the egg produces a poison. This causes the leaf to make the peculiar structure called the gall. A very remarkable fact is that although the gall is made by the tree and not by the insect, the same grub always produces the same kind of a gall and when one is acquainted with them, he can tell the kind of an insect that caused the gall by the shape and form of the gall.

These are only a few of the very interesting insects which inhabit this wonderful world of ours. Their study is fascinating. Those of us who teach our children to regard all insects as things to be dreaded and shunned are making a great mistake. They are not only robbing the children of the opportunity for acquiring much interesting information, but are causing them unnecessary fear and annoyance by causing them to dread or shun many perfectly harmless and interesting animals.



Your old friend, Doctor Dolomite, has been doing some field investigation for you. There's a thief by the name of Leaching who's robbing your grove, your crops of their lifeblood, magnesium, every year . . . to the sum of a boat 40 pounds per acre. There's one way to lock him out . . . and lock your profits in: add D-P DOLOMITE to your regular fertilizing progrem.

your regular fertilizing program.
You can get D-P DOLOMITE through your fertilizer dealer or direct from us.

Write for free booklet:

OTOMITE
Products Inc.

Hearings On Medfly Damage Completed

The joint congressional sub-committee on claims which had been investigating the extent of medfly eradication damage in the citrus belt of Florida for two weeks, held its final hearing in Orlando on December 17, and then adiourned subject to the call of the chairman, Senator Schwartz. The next meeting will be held in Washington.

Members of the committee explained to officials and growers present for the concluding session that they would go back to Washington and in subsequent meetings determine what future steps to pursue. If it is decided that the Florida claims for damages are just, they will set up machinery to go further into the whole system.

ADVERTISEMENT
DIAGNOSING THE PRESENT CROP SITUATION

(Continued from page 13) of the season, to leave off his winter application and depend on a Top Dresser, or some cheaper form of fertilizer. Not because we are in the fertilizer business, but because we think we are experienced growers, we urge most sincerely not to make that mistake. It will certainly be reflected in your tree condition and in your fruit quality.

The winter application of fertilizer can be applied even up to the middle of January with good results. If it is applied that late, it may be desirable to increase the amount and then eliminate the spring Top Dresser, but we certainly feel that it would be unwise to use anything but the best plant

food you can buy.

What has been said with reference to fertilization of citrus, applies with equal force to vegetables. Quality vegetables cannot be produced if quality fertilizer is not used. Dr. Jamison, Truck Horticulturist of the Florida Agricultural Experiment Station,

said in a recent article:

"High quality products are produced only on healthy, vigorous g r o w i n g plants. Thus, to insure high quality, the grower must use the very best of cultural methods in producing the crop. This means that the grower must use adequate fertilizer of the correct kind and that insect and disease injury must be held to a minimum by thorough spraying or dusting."

No truer statement could have been made. We say better results can be obtained through the use of Extra Value Vital Element Brands. These brands do not contain just the three or four elements usually found in fertilizer, but contain ten necessary elements. Before adjourning, the committee members paid tribute to the growers and citizens of Florida, Senator Wiley remarking: "I have been more than pleased to find in this state that high strain of Americanism that will count so much in the strenuous days lying ahead for this nation."

He declared that the testimony given by growers and others in the citrus belt proved to him their inherent honesty and that the claims they had put forth were modest in view of the medfly eradication damage.

A. E. Pickard, chairman of the Florida Growers' reimbursement committee, summed up the case, saying that tremendous damage had been done in the eradication; that the federal government had been the instrument of the damage and that claims of the growers were just and should be recognized.

Mr. Pickard said there should be no zones for damages. He declared that actually eradication damage and not fly damage was what had "bankrupted" Florida growers.

He istimated that the fly had done virtually no damage whatever and that the larvae had done little more. He said the records showed that only 10,000 boxes of citrus were damaged by the fly or its larvae.

"The real damage we suffered was caused by a mistake in the eradication method of the federal government," he said.

Jack Branham, insurance expert, testified that insurance companies had placed definite values on citrus trees for the purpose of frost insurance. Mr. Branham said that trees five years old were valued at \$8; trees 16 years old at \$20, and trees over 20 years old at \$25.

Mr. Branham's testimony was brought out in an effort to place a definite value upon trees destroyed in the eradication campaign, since in making their claims for damages, growers had placed widely divergent values upon their trees. The committee had been endeavoring to arrive at some definite value by which they might measure the damage sustained by growers whose trees had been destroyed.

Since the eradication campaign eleven years ago, Florida growers have endeavored to secure adjustment of their claims for damage to trees and other property, and the hearings just completed were brought about largely through the efforts of Senator Andrews and Congressman Peterson, with the aid of other Florida representatives in Washington.

Growers are hoping for favorable action when the committee holds further meetings in Washington.

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Advertisements

The rate for advertisements of this nature is only five cents per word for each insertion. You may count the number of words you have, multiply it by five, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

LAKE GARFIELD NURSERIES COMPANY BARTOW, FLORIDA

ALL STANDARD VARIETIES CIT-RUS TREES—SPECIAL PRICES NOW IN EFFECT

REWARD of five dollars to man showing me a SCUR ORANGE tree producing heavy crops RED fruits entirely free of scars and skin blemishes. Will pay additional for fruits and buds. Donald J. Nicholson, 1218 Greenwood, Orlando, Fla.

SUPERIOR CITRUS TREES of principal varieties. Also Persian limes and avocado trees and new varieties of tangelos. None injured by cold. Ward's Nursery, Avon Park,

ALYCE CLOVER SEED. Ripe and cleaned. Ideal cover and hay crop. Write for information. P. E. Synder, Box 866, Lakeland, Fla.

CHOICE Rough Lemon Seedlings 6 to 20 inches high, \$10.00 per thousand. Olan Altman, Sebring, Florida.

LARGE AND SMALL orange groves for sale also acreage suited for citrus culture, dairying and general farming. Charlton & Associates, Valuation Engineers and Real Estate Appraisers, Ft. Lauderdale,

PLANT SOAR'S SWEET ORANGE trees for profit, fruit sells in September for \$1.12½ to \$1.50 per box. No losses from drops or frozen fruit, does not dry out on lemon. Pomona Nurseries, Dade City, Fla.

FOR SALE—Casurina Lephidophloia
Florida's best windbreak trees
\$5.00 per 100 — \$45.00 per 1000.
S. F. Matthews, Homestead, Fla.

Commission Starts Study Of Citrus Advertising Program

Following complaints of the Florida Citrus Producers' Trade Association, presented by Manager Marvin H. Walker, the Florida Citrus Commission has begun a study of the advertising program now being pursued under direction of the commission.

The study requested will be carried on under the direction of the advertising committee, of which H. D. Ulmer of Largo is chairman. The committee is expected to make its report to the full commission at a regular meeting scheduled for Jan. 30.

While contending that he was not cricizing the commission, Mr. Walker stated that his organization members who, he said, paid one-half of the advertising fund of \$1,000,000, were not satisfied with the results being obtained from the advertising, either by volume of sales, prices or distribution and by Florida's adverse competitive situation.

Walker quoted figures he said showed that Texas, without an industry advertising program, has increased its distribution and returns from grapefruit, while Florida has been shipping less fruit this season at lower prices than last year. He drew a similar comparison between California and Florida orange sales.

He said that members of his organization were inclined to question the wisdom of the \$587,000 appropriation for daily radio advertising, a sum more than half the total advertising fund.

Last year most of the advertising appropriation was spent in newspapers and magazines, but this year the program makes a daily network radio broadcast its major item.

At the January 30 meeting of the Commission, when the advertising committee is to make a report on its study of the situation, Miss Mary Margaret McBride, the daily citrus commentator, will be in Florida and is expected to attend the meeting.

"The legislature meets soon and in my opinion unless we get results which can be shown, it will be a serious problem to maintain this program," Mr. Walker continued. "Canners, we understand, are opposing the three-cent tax on grapefruit because they say it makes it impossible to compete with the untaxed Texas grapefruit. Some fresh fruit shippers feel that canners are getting all the results because of the

phenomenal demand for canned fruit and juices, and there seems to be a question whether fresh and canned fruit advertising should be combined as they are on the commission's radio program."

Chairman Luther L. Chandler agreed that the general situation for the industry is not good, and added: "This is not the first time we have wrestled with this problem. I know

and you know that there are so many ramifications that a solution may be hard to find."

E. H. Williams, commission member from Crescent City, said the advertising program had been submitted to the entire industry and was adopted with the approval of the entire industry.

J. E. Palmer, a Davenport grower, said he thought the advertising program is good; "it may be the trouble can be found in the kind of fruit we are sending north."

It is expected that the entire matter will be threshed out at the next meeting of the commission.

Double Value With ...

BROGDEX REDUCES DECAY RETARDS SHRINKAGE

The Brogdex Process not only provides a

Better Wilt Control

but it also makes possible a

Better Polish

one that has longer life

* *

Some other wax processes may give you one and some the other,

BROGDEX

GIVES YOU BOTH

B. C. SKINNER, Distributor

THE BROGDEX SYSTEM

Coloring Room Process

Color Added Process

DUNEDIN, FLORIDA

Facts About Spiders

J. R. WATSON ENTOMOLOGIST, FLORIDA EXPERIMENT STATION

"Little Miss Muffet sat on a tuffet eating her curds and whey," runs the old nursery rime, "Along came a spider and sat down beside her and frightened Miss Muffet away." My topic is the foolishness of Miss Muffet in allowing herself to be scared out of her dinner by a harmless spider. The spider must have been harmless for the only dangerous spider Miss Muffet could have met in these parts is the Black Widow. The Black Widow does not go gaddling over the grass, but is strictly a home body spending her entire time in her nest except when she is a very young spider and looking for a home site. Now instead of running away, Miss Muffet should have gone on eating her dinner and watching that spider carefully. She probably would have learned some valuable things about spiders which would have helped her much in later life. We shall see what Miss Muffet might have learned, but first a word or two about the Black Widow which Miss Muffet did not see.

In the first place she is well named. She is black and during most of her a widow, through choice, for, as is the habit of many spdiers, scarcely is the honeymoon over before she proceeds to eat her spouse. She is shiny black and smooth, that is to say not covered with prominent hairs. She is about half an inch long when full grown and the hind part of her body is almost spherical. Although mostly black, there are some bright marks on her, red and yellow. The largest of these is an hour glass shaped scarlet patch on her under side. This mark will at once single her out from any other spider. Black Widows are found most commonly in a sheltered situation, in an out building. discarded tin cans, under boards, etc. We have found them frequently around the base of a magnolia tree, among buttresses of which they get some protection from the weather. Here they can construct their funnel shaped web, loosely woven. Although her bite is serious, the Black Widow can scarcely be called a dangerous animal. In the first place they are very loath to bite. They probably would never wantonly attack a person, but if one accidentally squeezed a Black Widow, he would

probably be bitten or if one touched the web in such a way as to vibrate it as would an insect caught therein, the spider might rush out and bite him before she perceived her mistake. The Black Widow is not particularly rare and the comparative rarity of her bites is due to the above habits.

Another group of spiders which have a bad reputation, most of it unjust, are the so-called "Tarantulas." There are many large spiders that go under this name. These we call "Tarantulas" are mostly inhabitants of the tropics and sub-tropics

including the Gulf states and the arid southwest. The largest of these and probably the largest spider in the world is the so-called "Bird" spider whose body gets to be almost two inches long. They get their name from the fact that they are reputed to kill young birds.

To this group belong the "Trapdoor' spiders which are occasionally seen in Florida, but more commonly in the southwest. They make burrows in the ground which they line with silk for the double purpose of keeping sand from filling them up and to supply a ladder so that they can quickly emerge. This tube is closed at the top, but the trap door is made of silk and hinged on one side. The spider lies in wait just inside this door for any unlucky insect that might come near. When it is seen she jumps out of her burrow and pounces upon her prey and drags

(Continued on page 22)

